

61

6. The method of claim 5 wherein the text cursor manipulations include generating text cursor motion signals in response to translational slides of a fifth predetermined number of fingertip contacts.

7. The method of claim 6 wherein the text cursor manipulations include generating text selection signals in response to translational slides of a sixth predetermined number of fingertip contacts.

8. The method of claim 5 wherein the text cursor manipulations include generating text selection signals in response to translational slides of a predetermined number of fingertip contacts.

9. A method for mapping gestures performed on a multi-touch surface to simulate mouse manipulations, the method comprising:

detecting a proximity image of a plurality of fingertip contacts on the multi-touch surface;

determining one or more of a size, shape and orientation associated with each of the plurality of fingertip contacts based on the proximity image;

generating mouse pointer motion signals in response to translational slides of a first predetermined number of fingertip contacts;

generating a single mouse click signal in response to a synchronized tap of a second predetermined number of fingertip contacts; and

generating a double mouse click signal in response to a synchronized tap of a third predetermined number of fingertip contacts,

wherein the gestures simulating mouse manipulations are performed with a first hand and gestures corresponding to text cursor manipulations are performed with an opposite hand.

10. The method of claim 9 wherein the text cursor manipulations include generating text cursor motion signals in response to translational slides of a fourth predetermined number of fingertip contacts.

11. The method of claim 10 wherein the text cursor manipulations include generating text selection signals in response to translational slides of a fifth predetermined number of fingertip contacts.

12. The method of claim 9 wherein the text cursor manipulations include generating text selection signals in response to translational slides of a fourth predetermined number of fingertip contacts.

13. A method for mapping gestures performed on a multi-touch surface to simulate mouse manipulations, the method comprising:

detecting a proximity image of a plurality of fingertip contacts on the multi-touch surface;

determining one or more of a size, shape and orientation associated with each of the plurality of fingertip contacts based on the proximity image;

62

generating mouse pointer motion signals in response to translational slides of a first predetermined number of fingertip contacts;

generating a single mouse click signal in response to a synchronized tap of a second predetermined number of fingertip contacts;

generating mouse drag signals in response to translational slides of a third predetermined number of fingertip contacts; and

associating each of the plurality of fingertip contacts with a fingertip from either a right or left hand, wherein the mouse pointer motion signals are generated in response to the translational slides of the first predetermined number of fingertip contacts from a particular hand,

the single mouse click signal is generated in response to the synchronized tap of the second predetermined number of fingertip contacts from the particular hand, and the mouse drag signals are generated in response to the translational slides of the third predetermined number of fingertip contacts from the particular hand.

14. The method of claim 13 further comprising:

generating a double mouse click signal in response to a synchronized tap of a fourth predetermined number of fingertip contacts from the particular hand.

15. A method for mapping gestures performed on a multi-touch surface to simulate mouse manipulations, the method comprising:

detecting a proximity image of a plurality of fingertip contacts on the multi-touch surface;

determining one or more of a size, shape and orientation associated with each of the plurality of fingertip contacts based on the proximity image;

generating mouse pointer motion signals in response to translational slides of a first predetermined number of fingertip contacts;

generating a single mouse click signal in response to a synchronized tap of a second predetermined number of fingertip contacts;

generating a double mouse click signal in response to a synchronized tap of a third predetermined number of fingertip contacts; and

associating each of the plurality of fingertip contacts with a fingertip from either a right or left hand, wherein the mouse pointer motion signals are generated in response to the translational slides of the first predetermined number of fingertip contacts from a particular hand,

the single mouse click signal is generated in response to the synchronized tap of the second predetermined number of fingertip contacts from the particular hand, and

the double mouse click signal is generated in response to the synchronized tap of the third predetermined number of fingertip contacts from the particular hand.

* * * * *